



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,107	12/21/2000	Andrew K. Krumel	802-004	2214

7590 03/10/2005

LOUDERMILK & ASSOCIATES
P.O. BOX 3607
LOS ALTOS, CA 94024-0607

EXAMINER

LUU, LE HIEN

ART UNIT	PAPER NUMBER
----------	--------------

2141

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,107

Applicant(s)

KRUMEL, ANDREW K.

Examiner

Le H Luu

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 32,33,35-39 and 42-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31,34,40-41, and 49-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/27/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Claims 1-54 are presented for examination.
2. New corrected drawings are required in this application because some drawings are informal, illegible, poor quality for publication. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.
3. Applicant's election of claims 34 and 49 of subgroups 1 and 2 respectively in the reply filed on 06/01/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-31, 34, 40-41, and 49-54 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hagiuda et al. (Hagiuda) patent no. 6,182,225.

6. As to claim 1, Hagiuda teaches the invention as claimed, including a method for transmitting information to or from a programmable logic device-based system ("PLD system") over a packet-based network using a protocol, comprising the steps of:

sending at least a first packet from a computing system to the PLD system over the network (col. 16 line 23 - col. 18 line 61);

in the PLD system, extracting first information from the first packet (col. 12 lines 9-55);

in response to the first information, sending at least a second packet from the PLD system to the computing system over the network, wherein the second packet contains information identifying the PLD system and also information indicative of one or more commands in accordance with the protocol, wherein the PLD system operates in accordance with the one or more commands (col. 65 line 65 - col. 66 line 57);

in response to the second packet, exchanging one or more third packets between the computing system and the PLD system over the network, wherein the one or more third packets comprise one or more commands in accordance with the protocol, wherein second information extracted from the one or more third packets is exchanged between the computing system and the PLD system (col. 65 line 65 - col. 66 line 57; col. 81 line 12 - col. 82 line 22).

7. As to claim 2, Hagiuda teaches the second information comprises information selected from the group consisting of: configuration information; bar code data; information indicative of a weight of one or more objects or material; information indicative of temperature; information indicative of movement or position; information indicative of a size of one or more objects or material; information indicative of a presence or amount of light; information indicative of pressure; information indicative of friction; information indicative of elevation; information indicative of thickness; information indicative of reflectivity; information indicative of wind; information indicative of a degree of moisture content; camera or other image data; information indicative of color or other optical characteristics of an object or material; information indicative of

success or failure of an operation; information derived from a magnetic card reader; information indicative of pitch or other sound characteristics; information indicative of a smell characteristics; information indicative of a texture characteristic; and information indicative of a status condition of an industrial process (col. 16 line 41 - col. 18 line 61).

8. As to claim 3, Hagiuda teaches the PLD system includes non-volatile memory for storage of data, wherein the non-volatile memory comprises Flash memory, electrically erasable and programmable read only memory or battery-backed-up random access memory (col. 14 lines 1-18).

9. As to claims 4-7, Hagiuda teaches a plurality of third packets are received by the PLD system, wherein, after receiving each of the third packets, the PLD system sends at least a fourth packet to the computing system over the network, wherein the fourth packets each acknowledge receipt of a corresponding one of the third packets; after receiving each of the third packets, the PLD system saves second data from the third packets in non-volatile memory of the system; wherein the PLD system saves the second data in the non-volatile memory of the system from each of the third packets prior to sending each of the fourth packets; and wherein, after receipt by the computing system of a fourth packet that acknowledges receipt by the PLD system of a final third packet, the computing system sends at least a fifth packet to the PLD system, wherein, in response to the fifth packet, the PLD system saves one or more data indicating that

Art Unit: 2141

all of the second data has been received and stored in the non-volatile memory (col. 14 lines 1-18; col. 81 line 12 - col. 28 line 36).

10. As to claims 8-11, Hagiuda teaches the second data is loaded into the PLD system in response to a user command from a user; wherein the user command comprises a command input by a switch; wherein the switch comprises a physical switch on the PLD system; wherein the user command comprises a command entered via the computing system (col. 14 lines 1-53).

11. As to claim 12-16, Hagiuda teaches one or more display devices provide visual feedback of the status of the PLD system; wherein the one or more display devices comprise one or more LEDs; wherein the one or more display devices comprise a liquid crystal display; wherein the PLD system provides audio feedback indicative of the status of the PLD system; wherein at least one LED indicates that the step of loading the second data into the PLD system is in process (col. 13 lines 14-24; col. 14 lines 32-53; col. 40 lines 1-14).

12. As to claims 17-20, Hagiuda teaches the PLD system processes packets sent from the computing system; the PLD system extracts commands in accordance with the protocol from the packets sent from the computing system; the second packet includes a version identifier for the PLD system; the second packet contains information that

Art Unit: 2141

identifies a plurality of commands in accordance with the protocol to which the PLD system responds (col. 16 lines 41 - col. 18 line 61; col. 26 lines 25-30; col. 66 line 62 - col. 67 line 5; figure 26).

13. As to claims 21-29 and 50-54, Hagiuda teaches the second packet contains information that is indicative of a location coupled to the network, wherein the location contains information that identifies a plurality of commands in accordance with the protocol to which the PLD system responds; the location comprises storage coupled to the computing system; the location comprises storage on a second network, wherein the computing system accesses the storage via the second network; the information that is indicative of the location comprises an address of a node on the second network; the second network comprises an Internet network; the information that is indicative of the location comprises a URL; the plurality of commands include one or more first commands to which the PLD system responds and also include one or more second commands to which the PLD system responds; the first commands comprise core commands to which at least a second system containing a second PLD system also responds; the second commands comprise custom commands to which the second PLD system does not respond (figures 7-8 and 43; col. 12 line 57 - col. 13 line 13; col. 16 lines 41 - col. 18 line 61).

14. As to claims 30-31 and 34, Hagiuda teaches the network comprises a local area network; the network comprises an Ethernet-based network; at least certain of the first, second or third packets comprise Ethernet packets (Figures 1 and 24).

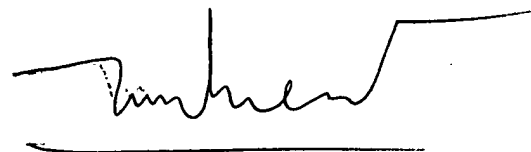
15. As to claims 40-41 and 49, Hagiuda teaches at least certain of the packets sent by the computing system comprises broadcast packets having a predetermined address that are directed to a first predetermined port; at least certain of the packets sent by the PLD system comprise packets having a predetermined source address that are directed to a second predetermined port; the PLD system includes first and second logic portions, wherein a first logic portion operates to communicate packets in accordance with the protocol with the computing system, wherein the second logic portion operates to carry out a process that does not comprise communicating packets in accordance with the protocol with the computing system (col. 13 line 14 - col. 14 line 24; col. 34 lines 11-36).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Le H Luu whose telephone number is 571-272-3884. The examiner can normally be reached on 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2141

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Le Hien Luu', is written over a horizontal line.

LE HIEN LUU
PRIMARY EXAMINER

March 07, 2005